

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A cable connection method for connecting an end of a conductor of a cable to a connecting face of a contact of a connector or substrate, such that a lengthwise direction of said connecting face and a lengthwise direction of said conductor are mutually matched in the connection, said method comprising:

pressuring said end of said conductor against said connecting face via a pair of electrodes mutually separated in the lengthwise direction of said conductor; and
passing an electric current between said pair of electrodes to weld said end of said cable and said connecting face together,

wherein:

a part of said conductor that comes into contact with the connecting face of said contact is formed as a flat surface; and

a part of said conductor that comes into contact with said electrodes is formed as a flat surface.

Claims 2-6 (canceled)

7. (currently amended) A cable connection having a configuration in which an end of a conductor of a cable is connected to a connecting face of a contact of a connector or substrate such that a lengthwise direction of said connecting face and a lengthwise direction of said conductor are mutually matched in the connection, said cable comprising:

a long elongated welded part formed in the lengthwise direction of said conductor in a connecting part between said conductor and said contact,

wherein the welding in said welded part is within the scope from the condition in which the depth at the top of a color changed part forming an arc on said contact is above 0.1 mm to the condition immediately prior to the condition of blasting of said contact,

wherein, the part of said conductor that comes into contact with said connecting face of said connector is formed as a flat surface, and

wherein, the part of said conductor that comes into contact with said electrodes is formed as a flat surface.

8. (currently amended) A cable connection having a configuration wherein an end of a conductor of a cable is connected to a connecting face of a contact of a connector or substrate such that a lengthwise direction of said connecting face and a lengthwise direction of said conductor are mutually matched in the connection, said cable comprising:

a long elongated welded part is formed in the lengthwise direction of said conductor in the connecting part between said conductor and said contact,

wherein the state of the welding in said welded part is within the scope from the condition in which the dispersion of a layer of precious metal thinly covering the surface of said conductor of said cable forms an alloy layer of that precious metal in said contact that is of a depth of 5 μ m to the condition in which said alloy layer is half the thickness of said contact,

wherein, the part of said conductor that comes into contact with said connecting face of said connector is formed as a flat surface, and

wherein, the part of said conductor that comes into contact with said electrodes is formed as a flat surface.

Claims 9 and 10 (canceled).

11. (currently amended) A cable welding device for connecting an end of a conductor of a cable to a connecting face of a contact of a connector or substrate such that a lengthwise direction of said connecting face and a lengthwise direction of said conductor are mutually matched in the connection, said cable welding device comprising:

a base on which said connector or substrate furnishing said contact can be disposed; a pair of electrodes mutually separated in the lengthwise direction of said conductor; pressure means capable of pressing, via said pair of electrodes, said end of said conductor in contact with said contact, thereby pressuring said end of said conductor against said connecting face; and

voltage applying means capable of applying voltage between said electrodes; and

a plurality of groupings of the conductors and contacts, wherein said pair of electrodes are shaped to weld and apply pressure to each of said groupings at the same time.

Claim 12 (canceled).

13. (previously presented) A cable connection, comprising:

a connector including a base having a plurality of conductive contacts, on a surface of the base, comprising a plurality of signal contacts and a plurality of ground contacts, wherein individual ground contacts are arranged between pairs of adjacent signal contacts; and a cable main body including a plurality of wire conductors that connect respectively to the plurality of contacts, wherein:

each of the wire conductors and each of the contacts are individually and electrically connected by welding; and
the wire conductors have a flat surface in contact with the respective contacts.

Claims 14-17 (canceled)

18. (previously presented) The cable connection method according to claim 1, wherein:
the welding comprises an arc-shaped color changed part in the contact; and
a depth of a top of the color changed part is in a range of 0.1 mm to a value immediately above which will cause blasting of the contact.

19. (previously presented) The cable connection method according to claim 1, wherein:
a layer of precious metal covers a surface of the conductor facing the contact;
the welding causes the layer of precious metal to disperse into the contact to form an
alloy layer; and
the alloy layer has a depth in a range of $5\mu\text{m}$ to half a thickness of the contact.

20. (previously presented) The cable connection according to claim 13, wherein:
the welding comprises an arc-shaped color changed part in the contact; and
a depth of a top of the color changed part is in a range of 0.1 mm to a value immediately
above which will cause blasting of the contact.

21. (previously presented) The cable connection according to claim 13, wherein:
a layer of precious metal covers a surface of the conductor facing the contact;
the welding causes the layer of precious metal to disperse into the contact to form an
alloy layer; and
the alloy layer has a depth in a range of $5\mu\text{m}$ to half a thickness of the contact.